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OBITUARY

**IN MEMORIAM FRANÇOIS VUILLEUMIER (1938–2017):
A RENOWNED BIOGEOGRAPHER, ORNITHOLOGIST, AND FRIEND
OF THE NEOTROPICS****Un renombrado biogeógrafo, ornitólogo y amigo del Neotrópico**

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When François Vuilleumier (Figure 1a), Curator Emeritus at the Department of Ornithology of the American Museum of Natural History (AMNH) and founding member of the Neotropical Ornithological Society, passed away on 11 January 2017 at his home in Piermont, New York, after a long battle with cancer, the scientific world lost one of its most famous and influential experts on avifauna and biogeography. He was 78 years old. Son of Willy Georges and Denise Geneviève (Privat) Vuilleumier, François was born on 26 November 1938 in Berne, Switzerland. His father was a well-known artist, a talent François himself also nurtured throughout his life. He described his passion for this activity in these words: “The schoolboy who drew birds eventually became an artist doing science. In the course of my career, I carried out research on the evolution of bird species all over the world, but mostly in the Andes of South America, from Venezuela to Tierra del Fuego. Some of the papers I published in technical journals incorporate my drawings. And wherever I went for my research, I drew birds. My portfolios include thousands of sketches of birds, sitting, feeding, preening, flying, scratching, or, simply, being birds” (extracted from Carolyn DeLisser Fine Art, 2017, *François Vuilleumier. An artist doing science*. <http://delisser.com/fineart/francoispg2r.html>; for examples see Figure 2). Another skill that he cultivated during his life was the mastery of several languages, such as French (mother tongue), English, German, and Spanish, and even some Italian and Portuguese. This ability allowed him, in addition to his kind and respectful character, to relate to many people from different regions and cultures.

François Vuilleumier obtained his *Licence es sciences naturelles*, at the University of Geneva, Switzerland, in 1961, and carried out postgraduate studies in ecology at the University of Illinois, Urbana, in 1962. Majoring in the natural sciences, he completed his Ph.D. in 1967 at Harvard University, Cambridge under the mentorship of Ernst Mayr. His thesis on “Speciation in High Andean Birds” led to multiple important papers (Vuilleumier 1965, 1967a, 1967b, 1969a, 1969b, 1970) that influenced researchers of different fields for decades. In 1966–1967, he served as Instructor at the University of Massachusetts, Boston, advancing to Assistant Professor, 1967–1970, and Associate Professor, 1971. He also was a Chapman Postdoctoral Fellow at AMNH (1967–1968). In 1971, he founded the Institute of Animal Ecology and Zoology, University of Lausanne (Switzerland) as Director and Professor, but he did not find enough support and left. Afterwards he became a Senior postdoc research fellow at the Marine Biological Station in Roscoff, France in 1972, and Visiting Professor at the Ecole Normale Supérieure, University of Paris in 1973–1974. Then in 1974, François first went to the American Museum of Natural History as an Associate Curator, becoming Curator in 1979, and remained there until 2005 when he retired. He served as Chairman of the Department of Ornithology from 1987–1992.

As a biogeographer, he took the opportunity to learn about bird assemblages in his trips and by leading many ornithological expeditions including Ecuador, Venezuela, Peru, Bolivia, Argentina, Chile, New Britain, and New Caledonia. Additionally, he served as cruise lecturer in trips to the North Pole, Antarctica, Galapagos, Falkland Islands, New Guinea, Africa, Iceland, and Madagascar.

His enthusiasm for the Neotropics, especially for their nature and avifauna, can be documented by many episodes, which likely would fill a separate book. For example, Dave Ewert, who joined François in 1975 for a month-long expedition to survey the avifauna of Venezuela’s páramos, witnessed François’s love of the Andes and sense



Figure 1. François Vuilleumier in the woods of New York in the early 1980's (A, provided by Rebecca Finnell), and in a Venezuelan páramo, March 1975 (B, photo by Dave Ewert).

of adventure. Their journey together included traveling a road to Páramo de Quirorá in a series of hairpin curves of which each segment was barely long enough for their jeep to navigate each section before reaching the next hairpin; François was invigorated by exploring a new páramo and the thrill of not tumbling 2000 m down the mountain. They also visited Páramo Tamá, on the Colombian border. With their guide, they drove to the last house at the end of the road where a foot trail led to the páramo. Arriving late, the campesinos generously gave them a room to stretch their bedding on the floor and served a hearty meal of rice, beans, and eggs. François cheerfully chatted with their hosts before retiring early. They hiked up the mountain the next morning with a mule carrying their gear before reaching the “camping” site – an opening under a large boulder where they were sheltered from rain and could store food for two days. François was in his element – collecting data on a new páramo avifauna, absorbing the science and spirit of the páramo, all the while dressed sportingly (Figure 1b). Here, in these wild places, his enthusiasm for evaluating the dispersal of avian species in Andean and Patagonian systems really came alive.

Although unable to attend the First Ibero-American Congress of Ornithology held in Buenos Aires,

Argentina in 1979, François greeted the news of the meeting with great enthusiasm, especially because interest was growing for the formation of a Neotropical ornithological society. The next Ibero-American congress (called II Congress of Neotropical Ornithology) was held in Xalapa, Veracruz, Mexico. Both congresses provided the impetus for the development of ornithology and avian conservation in the various Neotropical countries, which François and other ornithologists stimulated.

In 1987, François helped to rescue the organization by supporting Dr. Humberto Álvarez for the III Congress in Cali, Colombia, where the founding of the Neotropical Ornithology Society occurred, acquiring its legal status and a Board of Directors with Mario Ramos-Olmos as its first President. In spite of the difficult circumstances in Colombia, due to security issues at that time, the congress was a great success. Numerous Colombian students as well as a good proportion of international ornithologists from within and outside the Neotropics were joining this event and, as is traditional in international congresses, could spend an intermediate day exploring regional ecosystems (e.g., the Colombian páramo) and especially getting to know new birds. Thanks to the hospitality of Gustavo Kattan and Carolina



Figure 2. Some examples of F. Vuilleumier's artwork. Rusty-backed Monjita (*Neoxolmis rubetra*, left) and White-throated Treerunner (*Pygarrhichas albogularis*, right).

Murcia, François and I visited a finca in the mountains, where François introduced me to the majestic mountains of the Andes. In addition to his scientific contributions to the congress's sessions, François's warm personality contributed to the collegial atmosphere enjoyed by the congress's professionals and students, who took François and me to a "peña" to enjoy music.

François always supported the Neotropical Ornithological Society, which was maintained thanks to the generous work of its Board of Directors and the society's organization of international congresses. After Cali, the next congress was held in Quito, followed by Ecuador (1991), in Asunción, Paraguay (1995), and Monterrey, Mexico (1999) where François assumed the Presidency of the Society, until the congress in Termas de Puyehue, Chile in 2003. Most importantly, as President of the Neotropical Ornithological Society he supported Latin American student engagement in research and at meetings.

François received many accolades for his professional accomplishments including election as a Fellow of the American Ornithologists' Union (1970), Fellow of the American Association for the Advancement of Science (1986), Corresponding (1986) and Honorary (2006) Member of the Société Ornithologique de France, and President (1999–2003) of the Neotropical Ornithological Society. In addition, he participated in other scientific societies all over the world, such as Asociación Ornitológica del Plata (Argentina), Neotropical Bird Club (UK), Società Italiana di Scienze Naturali (Italy), Société de Biogéographie (France, Honorary Member), Society for the Study and Protection of Birds (Switzerland), Unión de Ornitólogos de Chile (Chile), and Zeiss Historical Society (New Jersey, USA). He also served several scientific societies as a member of their editorial board: Acta Zoológica Mexicana (México), Anales del Instituto de la Patagonia (Chile), Ararajuba, Journal of the Brazilian Ornithological Society (Brazil), Ornitología Neotropical (USA), Revue d'Ecologie (France), Rivista Italiana di Ornitologia

(Italy), and Zoosystema, Musée National d'Histoire Naturelle (France). He also was a member of the International Council for Bird Preservation (board directors Pan-American section), and part of the executive committee of the International Ornithological Congress Committee.

François was deeply engaged with teaching and mentoring, as Adjunct Professor in the Graduate Program of the City University of New York (CUNY) since 1978, as well as during summers at the College of the Atlantic, Bar Harbor, Maine (1987–1992, 1995, 1999, 2000). He also served as professor at the University of the Andes, Mérida, Venezuela in 1981. His graduate students and research associates included: Allison V. Andors, Research Associate at AMNH, Sara Bertelli (Ph.D., Universidad de Tucumán, Argentina), Katja Kunz (Ph.D., University of Cologne, Germany), Rebeca Lobo (Ph.D., University of Tucumán, Argentina), and the author of this article, Patricia Escalante (Ph.D., CUNY, from México).

Rebeca Lobo met François in 2000, at the National Banding Center (Argentina) with Patricia Capllonch and shared a campaign that included several provinces in the northern Argentina (Santiago del Estero, Chaco, Salta, and Tucumán). His passion for natural environments was an encouragement for every student enthusiast, sharing his knowledge of the Chaco birds and his special interest in the Quebracho Crested Tinamou (*Eudromia formosa*). His contribution to the knowledge of birds in the Neotropics is well recognized in Argentina, as well as his generous sharing of information, professional advice, and part of his vast bibliography of birds from Argentina.

François' outstanding bibliography comprises 280 scientific publications between 1956 and 2005 including 2 books, 102 research papers (including review articles and chapters in books), 14 short papers and notes, 86 book reviews, 14 abstracts, and 62 miscellaneous publications. His research papers, reviews, and book chapters are listed in the online supplement accompanying this obituary. He mainly

focused on various biogeographic topics, either by emphasizing the ecological component or structure of bird communities (Vuilleumier 1967b, 1972, 1979, 1998; Vuilleumier & Ewert 1978), or by exploring historical aspects as well (Vuilleumier 1968, 1969b, 1984c, 1985b, 1994), mainly within the framework of the theory of island biogeography, and going to the most "isolated" ecosystems (Vuilleumier 1970, 1973). In South America, such archipelagos were the páramos and puna, where he examined patterns in avian faunal composition and historical factors contributing to these patterns (Vuilleumier 1970, 1984a, 1984b, 1985a, 1986, 1991; Vuilleumier & Simberloff 1980).

His most influential contributions were perhaps those in which he analyzed and interpreted patterns of speciation in the Andes, taking into account the climatic fluctuations of the Pleistocene and changes in the distribution of habitats and their species (Vuilleumier 1969b, 1970, 1972, 1980; Vuilleumier & Ewert 1978). Also notable for its originality were his studies on faunal turnover and development of fossil avifaunas in South America (Vuilleumier 1984c, 1985a), compiling all the bird fossil faunas then known for the Cenozoic Age. He also wrote noteworthy book chapters on these topics and the American biotic exchange for the case of birds in monographs, such as Vuilleumier (1975, 1985a, 1985b, 1997), Vuilleumier & Simberloff (1980), and Blondel et al. (1984). In continuation of these contributions, he co-authored the book *High Altitude Tropical Biogeography* (Vuilleumier & Monasterio 1986), a milestone in Andean biogeographic research.

In the 1990s, he contributed much to the maintenance and growth of the journal *Ornitología Neotropical* where he published regularly, as well as contributing numerous book reviews. In 1991, for example, he published a paper on the history of bird speciation in Patagonia by quantitatively analyzing the patterns of 217 species that breed in this region, detecting those that could have originated during the Pleistocene or earlier (Vuilleumier 1991).

With regard to the development of Neotropical ornithology, two thoughtful and insightful contributions articulating the need to collect specimens in this region (Vuilleumier 1998, 2000) are noteworthy. Based on his year-long curatorial and field work experience, he was in the excellent position to highlight the role of scientific collections in the development of ornithological knowledge while taking into account the needs of bird conservation, and thus provided a very balanced view on this often controversial topic. In 2003, he reflected on the history and development of ornithology in the Neotropical Region (Vuilleumier 2003), where the first years were shaped by the exploratory spirit of European and United States ornithologists, who started to describe and document the birds of the region. He readily acknowledged authors of several nationalities and also recognized and encouraged the contributions of Latin American residents, and also suggested a working guide to enrich

this discipline and increase knowledge of the rich Neotropical bird fauna (Vuilleumier 2003).

Based on the excellent library of the American Museum of Natural History, and as a service to ornithology he contributed valuable taxonomic contributions by making summaries of the newly described species of birds of the world in several periods, beginning with Mayr & Vuilleumier (1983) where they gathered the 48 species described in the period from 1966 to 1975; Vuilleumier & Mayr (1987) for those described between 1976 and 1980; and Vuilleumier et al. (1992) for those described between 1981 and 1990. In 1999, dedicating his work to three important figures in his career, Gilles Sauter (uncle), Paul G  roudet (mentor for birds in the field), and Ernst Mayr (mentor in his scientific career), Fran  ois wrote a complete overview of the history, philosophy, and current practices of biogeography (Vuilleumier 1999).

As an acknowledgement of his predecessors at the museum, he wrote a biography of the multifaceted *chief* who indelibly left his mark on the Department of Ornithology, the Dean of American Ornithologists, Frank M. Chapman (Vuilleumier 2005a). He also reviewed the work of his mentor Ernst Mayr, whose passion for the subject of biogeography had not been sufficiently recognized at that time. Fran  ois took this opportunity to acknowledge his intellectual debt to Mayr, as well as being a source of inspiration and encouragement (Vuilleumier 2005b).

A capstone of his far-reaching career was the publication of the *American Museum of Natural History Birds of North America* (Vuilleumier 2009), a complete, beautifully crafted photographic guide to 657 species of birds found in the United States and Canada for which he was editor.

Based on his winning mentality, organization talent, and ability to convince people to engage in the (financial) needs of Neotropical ornithological research, he connected with Robert G. Goelet, New York, Associate of Vertebrate Zoology and Ornithology at AMNH, to establish the Fran  ois Vuilleumier Fund, which became a major source of awarding student projects throughout the Neotropics (including the Caribbean). The results of these donations are impressive: From 2008 to 2016, there were a total of 55 applications from nine countries (Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Mexico, Peru, Venezuela), and a total of 17 awards were made, facilitating and encouraging young Latin American graduate students to pursue field studies of Neotropical birds.

In his 31 years in the Department of Ornithology at AMNH, Fran  ois touched many members of the museum with his charm, graciousness, and advocacy for ornithological science, education, and conservation. Fran  ois's spirit of adventure, passion for understanding the distribution of Andean birds, wide ranging interests, reaching out to others, and compassion will be missed.

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